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EXAMINER  
WJ.D

ART UNIT 2736 PAPER NUMBER

DATE MAILED:

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01/27/98

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

# Office Action Summary

Application No.  
**08/910,487**

Applicant(s)  
**Kelvin Patrick Austin Pearman**

Examiner  
**Daniel J. Wu**

Group Art Unit  
**2736**



☒ Responsive to communication(s) filed on Jul 25, 1997

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire THREE month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

## Disposition of Claims

☒ Claim(s) 1-23 is/are pending in the application.

Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

☐ Claim(s) \_\_\_\_\_ is/are allowed.

☒ Claim(s) 1-4, 7-17, and 20-23 is/are rejected.

☒ Claim(s) 5, 6, 18, and 19 is/are objected to.

☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

☒ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some\* ☒ None of the CERTIFIED copies of the priority documents have been

☒ received.

☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

☒ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_

☐ Interview Summary, PTO-413

☒ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

Art Unit: 2736

1. The Group and/or Art Unit location of your application in the PTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Group Art Unit 2736.

*Claim Rejections - 35 USC § 112*

2. Claim 9 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 9, line 7, term "the hemi-cylindrical part" lacks proper antecedent basis.

*Claim Rejections - 35 USC § 102*

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4, 7-8, 10, 12 and 21-22 are rejected under 35 U.S.C. 102(b) as being anticipated by **Snyder et al.** [**Snyder**; US. 4,075,603].

*mw* For claims 1-4, **Snyder** discloses an apparatus and method for indicating of the pressure of a rotating tire having the claimed <sup>detector</sup>~~detector~~, signal emitter, power supply means, electrical power generator, first part, second part and offset weight which are met by the sensing means

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(24,204), radio transmitter (22,202), generator (20,200), stator components (48) and rotor components (110), see Fig.2 and 6. The rotor has a pendulum weight 130 to maintain the rotor being stationary.

For claims 7-8, **Snyder** further discloses the claimed permanent magnet , electro-magnetic core and north/south orientation of the magnet which are met by the magnets (112) and stator field coil structure (80), see Fig.2.

For claims 10 and 12, the claims are interpreted and rejected for the same reasons as stated in the rejections of claim 1 as stated above.

For claims 21-22, it is inherent that the vehicle has more than one tires. The claimed receiver and driver's cabin, indicating means are met by the receiving unit (302) and indicating means (304) located in the instrument panel of the vehicle.

### *Claim Rejections - 35 USC § 103*

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

*pw.* Claims 11, 13, 14-17, ~~19~~20 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Snyder**.

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1           For claims 11 and 13-14, although **Snyder** only shows a tubeless tire rather than the  
2           claimed tube type tire, it is known in the art that either tube or tubeless tire would use a mouth  
3           piece (i.e. the claimed valve) where the tire can be inflated or deflated. **Snyder** shows a pressure  
4           sensor 24 being secured to the stem 174 with a valve (170) in it. The switch also has piston 176,  
5           bias spring 178 as the claimed valve control member. It is clear to see that the tire can be inflated  
6           through the valve 170, see Fig.1 and 5.

7 *pw*       For claims 15-17 and 19, **Snyder** discloses all the claimed subject matters except the  
8           claimed printed circuit board and antenna being on the printed circuit board. **Snyder** states that  
9           the entire housing and generator would be preferred in the package of 2" (W) x 2" (D) x 3/4" (H)  
10          size. Therefore, it would have been obvious for the one of ordinary skill in the art to place the  
11          electronic circuitry on a printed circuit board using known LSI design in order to achieve the  
12          intended result. Further, it also known in the art that the antenna takes various forms depending  
13          upon the application. It is certainly within the skill in the art to use type of antenna which can be  
14          formed on the surface of the printed circuit board such as patch antenna in order to further reduce  
15          the size of the package.

16          For claims 20 and 23, as discussed above, it is known in the art that the vehicle contains  
17          more than one wheel. Thus, it would have been obvious to the one of ordinary skill in the art to  
18          have one detector for each wheel. In order to distinguish which tire has improper pressure  
19          setting, it also would be within the ordinary skill of one artisan to provide identification within the  
20          radio signal in order to distinguish one tire from the others.

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*Conclusion*

5. Claims 5-6 and 18-19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. Claim 9 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112 set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

**Merz** disclosed an automatic wireless tire pressure monitoring system. [US. 4,163,208]

**Barbee** disclosed a low tire pressure alarm system. [US. 4,468,650]

**Thomas et al.** disclosed an externally mounted generators for pneumatic wheels. [US. 4,539,496]

**Sharpe et al.** disclosed a tire pressure and temperature measurement system. [US. 5,228,337]

**Robbinson, III** disclosed a remote tire pressure monitoring system employing coded tire identification and radio frequency transmission, and enabling recalibration upon tire rotation or replacement. [US. 5,600,301]

8. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

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1 Washington, D.C. 20231

2 **or faxed to:**

3 (703) 308-9051 or (703) 305-3988, (for formal communications intended  
4 for entry)


5 **Or:**

6 (703) 305-3988 (for informal or draft communications, please label  
7 "PROPOSED" or "DRAFT")

8 Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal  
9 Drive, Arlington. VA., Sixth Floor (Receptionist).

10  
11 9. Any inquiry concerning this communication should be directed to Examiner Daniel Wu at  
12 telephone number (703) 308-6730. The examiner can normally be reached on Monday-Friday,  
13 7:30a-3:30p. If attempt to reach the examiner by telephone are unsuccessful, the examiner's  
14 supervisor, Jeffery Hofsass, can be reached on (703) 305-4717.

15 Any inquiry of a general nature or relating to the status of this application should be  
16 directed to the Group receptionist whose telephone number is (703) 305-8576, Mon-Fri, 8:30a-  
17 5:00p.

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22 **DANIEL J. WU**  
23 **Patent Examiner**

24 D. Wu  
25 January 20, 1998